

STN Structure Search 7.5-05

10/733,229

=> d ibib abs hitstr 1-19

L4 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:534300 CAPLUS

DOCUMENT NUMBER: 141:65094

TITLE: Substituted 1-benzoyl-3-cyano-pyrrolo[1,2-a]quinolines and analogs as activators of caspases and inducers of apoptosis

INVENTOR(S): Cai, Sui Xiong; Drewe, John A.; Jiang, Sungchun; Kasibhatla, Shailaja; Kuemmerle, Jared Daniel; Sirisoma, Nilantha Sudath; Zhang, Han-Zhong

PATENT ASSIGNEE(S): Cytovia, Inc., USA

SOURCE: PCT Int. Appl., 106 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004055163	A2	20040701	WO 2003-US39550	20031212
WO 2004055163	A3	20040826		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2005014759	A1	20050120	US 2003-733229	20031212
PRIORITY APPLN. INFO.:			US 2002-432608P	P 20021212

OTHER SOURCE(S): MARPAT 141:65094

AB The invention discloses substituted 1-benzoyl-3-cyanopyrrolo[1,2-a]quinolines and analogs thereof. Compds. of the invention are activators of caspases and inducers of apoptosis. Therefore, the compds. of the invention can be used to induce cell death in a variety of clin. conditions in which uncontrolled growth and spread of abnormal cells occurs. Compound prepn is described.

IT 713076-48-3P 713076-50-7P 713076-51-8P  
713076-53-0P 713076-68-7P 713076-69-8P  
713076-72-3P 713076-74-5P 713076-76-7P  
713076-95-0P

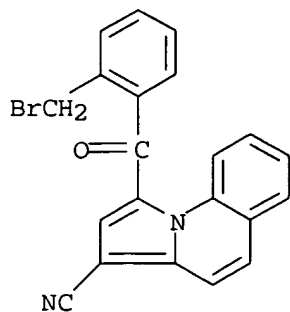
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(benzoylcyanopyrroloquinolines and analogs as activators of caspases and inducers of apoptosis)

RN 713076-48-3 CAPLUS

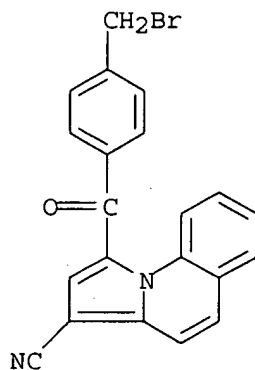
CN Pyrrolo[1,2-a]quinoline-3-carbonitrile, 1-(3-methoxybenzoyl)- (9CI) (CA INDEX NAME)

10/733,229



RN 713077-34-0 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carbonitrile, 1-[4-(bromomethyl)benzoyl] - (9CI)  
(CA INDEX NAME)

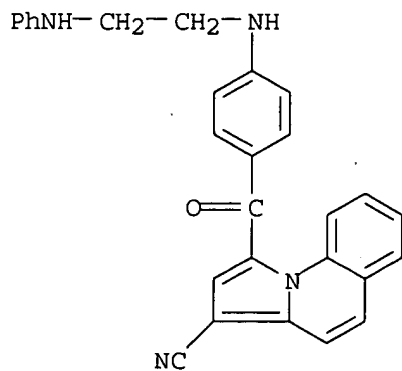


IT 713077-29-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(benzoylcyanopyrroloquinolines and analogs as activators of caspases  
and inducers of apoptosis)

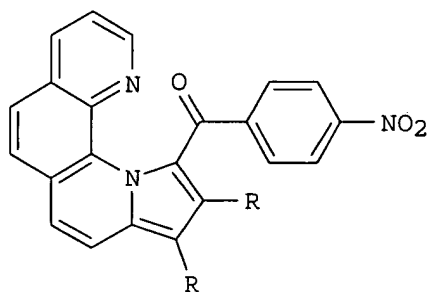
RN 713077-29-3 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carbonitrile, 1-[4-[[2-(phenylamino)ethyl]amino]benzoyl] - (9CI) (CA INDEX NAME)



10/733,229

DOCUMENT NUMBER: 140:111296  
TITLE: New pyrrolo[1,2-a][1,10]phenanthrolines with helical  
chirality  
AUTHOR(S): Dumitrascu, Florea; Mitan, Carmen Irena; Draghici,  
Constantin; Caproiu, Miron Teodor  
CORPORATE SOURCE: Institute of Organic Chemistry, Roumanian Academy,  
Bucharest, Rom.  
SOURCE: Revue Roumaine de Chimie (2003), Volume Date 2002,  
47(8-9), 881-884  
CODEN: RRCHAX; ISSN: 0035-3930  
PUBLISHER: Editura Academiei Romane  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 140:111296  
GI

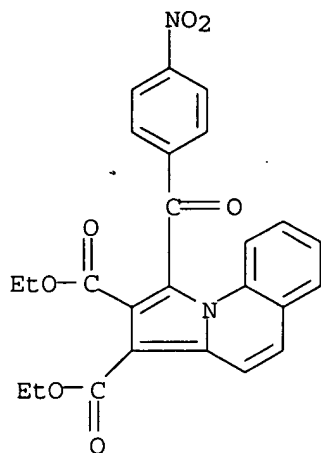


AB The [3 + 2]-dipolar cycloaddn. reaction of 1-(4-nitrophenacyl)-1,10-phenanthroline ylide with di-Me, di-Et, and diisopropyl acetylenedicarboxylates is a facile synthetic route to helical pyrrolo[1,2-a][1,10]phenanthrolines I (R = CO<sub>2</sub>Me, CO<sub>2</sub>Et, CO<sub>2</sub>i-Pr). The helical chirality of I (R = CO<sub>2</sub>Et, CO<sub>2</sub>i-Pr) was proved by <sup>1</sup>H NMR spectroscopy.

IT **374679-46-6P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(regioselective preparation of di-Et nitrobenzoylpyrroloquinolinedicarboxylate via [3 + 2]-dipolar cycloaddn. of nitrophenacylquinolinium bromide with di-Et acetylenedicarboxylate followed by dehydrogenation)

RN 374679-46-6 CAPLUS

CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-(4-nitrobenzoyl)-, diethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:43839 CAPLUS

DOCUMENT NUMBER: 138:385258

TITLE: Synthesis of fluorinated indolizines and 4H-pyrrolo[1,2-a]benzimidazoles via 1,3-dipolar cycloaddition of fluoroalkenes to N-ylides

AUTHOR(S): Wu, Kai; Chen, Qing-Yun

CORPORATE SOURCE: Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China

SOURCE: Synthesis (2003), (1), 35-40  
CODEN: SYNTBF; ISSN: 0039-7881

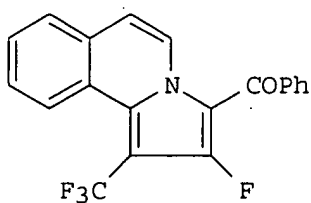
PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

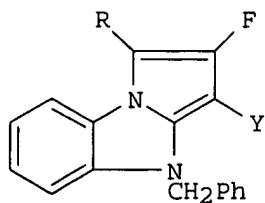
LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:385258

GI



I



II

AB In the presence of K<sub>2</sub>CO<sub>3</sub> and Et<sub>3</sub>N, pyridinium, quinolinium, isoquinolinium and benzimidazolinium N-ylides, generated in situ from their halides, react with gaseous fluoroalkenes CF<sub>2</sub>:CFX (X = Cl, Br, CF<sub>3</sub>) in DMF under atmospheric pressure in normal glassware at 70° to give fluorinated indolizines, e.g., I, or 4H-pyrrolo[1,2-a]benzimidazoles, e.g., II (R = COPh, COOEt, CN; Y = F, CF<sub>3</sub>), via 1,3-dipolar [3+2] cycloaddn. Similar results are obtained with tetrafluoroethene in an autoclave.

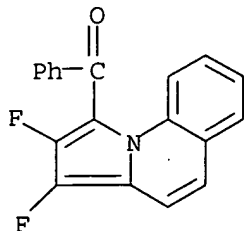
IT 528584-07-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(fluorinated indolizines and 4H-pyrrolo[1,2-a]benzimidazoles via 1,3-dipolar cycloaddn. of fluoroalkenes to N-ylides)

10/733,229

RN 528584-07-8 CAPLUS

CN Methanone, (2,3-difluoropyrrolo[1,2-a]quinolin-1-yl)phenyl- (9CI) (CA  
INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:622701 CAPLUS

DOCUMENT NUMBER: 138:89650

TITLE: N-Bridgehead heterocyclic compounds  
thenoyl-substituted. I Indolizines and  
benzoindolizines

AUTHOR(S): Georgescu, Emilian I.; Georgescu, Florentina; Roibu,  
Constantin; Draghici, Constantin C.; Caproiu, Miron T.

CORPORATE SOURCE: S. C. Oltchim S. A. Research Center, Ramnicu Valcea,  
1000, Rom.

SOURCE: Revue Roumaine de Chimie (2002), Volume Date 2001,  
46(4), 357-362

CODEN: RRCHAX; ISSN: 0035-3930

PUBLISHER: Editura Academiei Romane

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:89650

AB New thenoyl-substituted indolizine and benzoindolizine deriv's. were  
obtained by the reactions of pyridines and benzopyridines with  
2-bromoacetylthiophene followed by the reactions of the resulting  
quaternary salts with activated acetylenic compds. in the presence of an  
epoxide. This synthetic procedure was applied for the synthesis of some  
thenoyl-substituted indolizines, pyrrolo[1,2-a]quinolines and  
pyrrolo[2,1-a]isoquinolines, otherwise difficult to obtain.

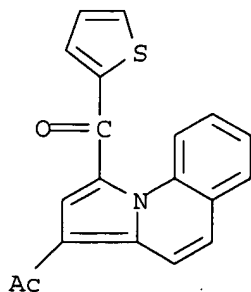
IT 302913-60-6P 302913-61-7P 374679-53-5P

482579-37-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of thenoylindolizines and -benzoindolizines)

RN 302913-60-6 CAPLUS

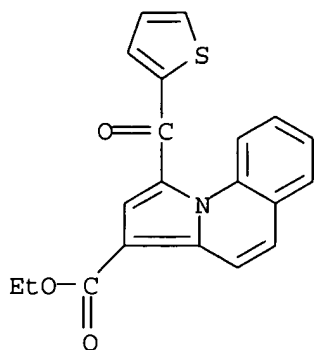
CN Ethanone, 1-[1-(2-thienylcarbonyl)pyrrolo[1,2-a]quinolin-3-yl]- (9CI) (CA  
INDEX NAME)



10/733,229

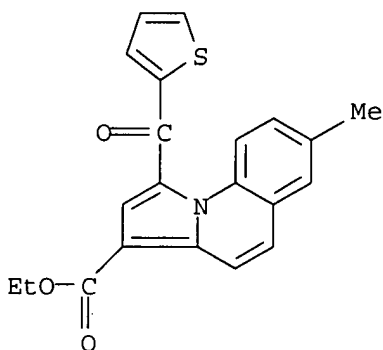
RN 302913-61-7 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carboxylic acid, 1-(2-thienylcarbonyl)-, ethyl ester (9CI) (CA INDEX NAME)



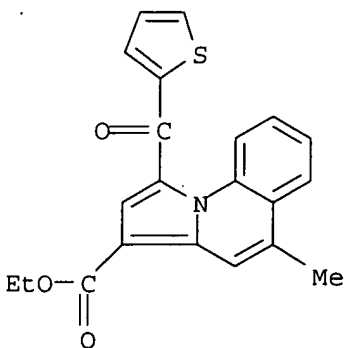
RN 374679-53-5 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carboxylic acid, 7-methyl-1-(2-thienylcarbonyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 482579-37-3 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carboxylic acid, 5-methyl-1-(2-thienylcarbonyl)-, ethyl ester (9CI) (CA INDEX NAME)



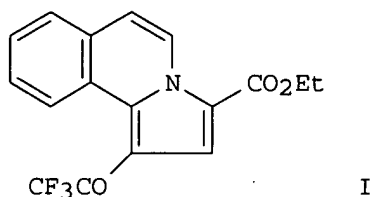
REFERENCE COUNT:

11

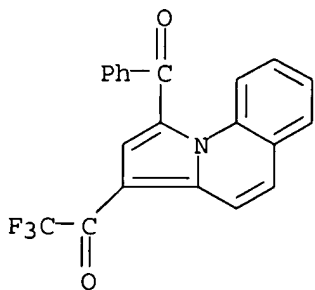
THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/733,229

ACCESSION NUMBER: 1999:801102 CAPLUS  
DOCUMENT NUMBER: 132:122502  
TITLE: Preparation of 1-(trifluoroacetyl)indolizines and their derivatives via cycloaddition of pyridinium N-ylides with 4-ethoxy-1,1,1-trifluorobut-3-en-2-one  
AUTHOR(S): Zhu, Shi-zheng; Qin, Chao-yue; Wang, Yan-Li; Chu, Qian-li  
CORPORATE SOURCE: Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China  
SOURCE: Journal of Fluorine Chemistry (1999), 99(2), 183-187  
CODEN: JFLCAR; ISSN: 0022-1139  
PUBLISHER: Elsevier Science S.A.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 132:122502  
GI



AB Under basic reaction conditions pyridinium or isoquinolinium N-ylides (C<sub>5</sub>H<sub>5</sub>N+CH<sub>2</sub>Y Br- or C<sub>9</sub>H<sub>7</sub>N+CH<sub>2</sub>Y Br-; Y = CO<sub>2</sub>Me, CO<sub>2</sub>Et, CN, PhCO) reacted readily with 4-ethoxy-1,1,1-trifluorobut-3-en-2-one to give 1-(trifluoroacetyl)indolizines or -pyrrolo[1,2-a]isoquinolines. The mol. structure of product I was determined  
IT **256234-59-0P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(cycloaddn. of pyridinium or isoquinolinium N-ylides with ethoxytrifluorobutenone)  
RN 256234-59-0 CAPLUS  
CN Ethanone, 1-(1-benzoylpyrrolo[1,2-a]quinolin-3-yl)-2,2,2-trifluoro- (9CI)  
(CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1999:281626 CAPLUS  
DOCUMENT NUMBER: 130:337991  
TITLE: Facile one-step synthesis of 1-acylindolizines by the

reaction of pyridinium salts with Mannich bases in the presence of TPCD

AUTHOR(S): Wang, Bing-Xiang; Hu, Jia-Xin; Hu, Yue-Fei; Hu, Hong-Wen

CORPORATE SOURCE: Dep. Chem., Nanjing Univ., Nanjing, 210093, Peop. Rep. China

SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1999), 20(3), 418-420  
CODEN: KTHPDM; ISSN: 0251-0790

PUBLISHER: Gaodeng Jiaoyu Chubanshe

DOCUMENT TYPE: Journal

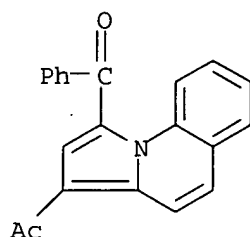
LANGUAGE: Chinese

AB A facile one-step method is presented for the synthesis of 1-acylindolizines in moderate yield by the reaction of pyridinium salts with Mannich bases in the presence of NaHCO<sub>3</sub> and a mild oxidizing agent, tetrakispyridine cobalt dichromate (TPCD). For example, 1-acetyl-3-benzoylindolizine was prepared in 36% yield from phenacylpyridinium bromide and 4-dimethylamino-2-butanone hydrochloride.

IT **189024-24-6P 189024-25-7P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of 1-acylindolizines by reaction of pyridinium salts with Mannich bases in presence of TPCD)

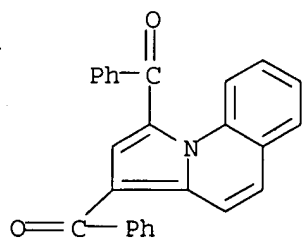
RN 189024-24-6 CAPLUS

CN Ethanone, 1-(1-benzoylpyrrolo[1,2-a]quinolin-3-yl)- (9CI) (CA INDEX NAME)



RN 189024-25-7 CAPLUS

CN Methanone, pyrrolo[1,2-a]quinoline-1,3-diylbis[phenyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:283544 CAPLUS

DOCUMENT NUMBER: 128:270501

TITLE: Synthesis of indolizines by 1,3-dipolar cycloaddition

AUTHOR(S): Li, Jun; Li, Hongde; Yu, Yufei; Hu, Hongwen

CORPORATE SOURCE: Dep. Chem., Jinzhong Teachers Coll., Yuci, 030600, Peop. Rep. China

SOURCE: Hebei Daxue Xuebao, Ziran Kexueban (1998), 18(1), 31-34  
CODEN: HDXKEB; ISSN: 1000-1565

PUBLISHER: Hebei Daxue



10/733,229

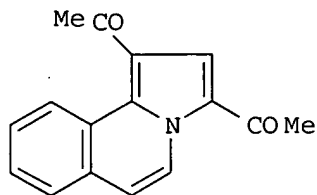
DOCUMENT TYPE:

Journal

LANGUAGE:

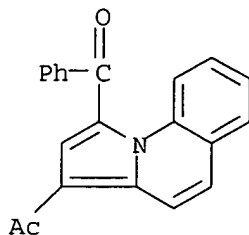
Chinese

GI

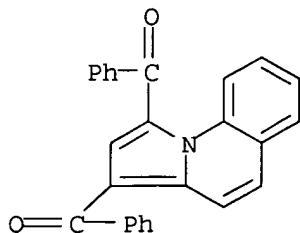


II

- AB An efficient and convenient method in the preparation of indolizines by 1,3-dipolar cycloaddn. of quinolinium and isoquinolinium ylides with  $\alpha,\beta$ -unsatd. ketones in the presence of tetrakis(pyridine)cobalt(II) bis(chromate)(I) was reported. E.g., reaction of 2-(2-oxopropyl)isoquinolinium bromide with Me vinyl ketone in DMF in the presence of  $\text{NaHCO}_3$  and I at  $90^\circ$  for 4-5 h gave 60% indolizine derivative II.
- IT **189024-24-6P 189024-25-7P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of indolizines by 1,3-dipolar cycloaddn. of quinolinium and isoquinolinium ylides with  $\alpha,\beta$ -unsatd. ketones)
- RN 189024-24-6 CAPLUS
- CN Ethanone, 1-(1-benzoylpyrrolo[1,2-a]quinolin-3-yl)- (9CI) (CA INDEX NAME)



- RN 189024-25-7 CAPLUS
- CN Methanone, pyrrolo[1,2-a]quinoline-1,3-diylbis[phenyl]- (9CI) (CA INDEX NAME)



- L4 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
- ACCESSION NUMBER: 1997:246472 CAPLUS
- DOCUMENT NUMBER: 126:293244
- TITLE: A convenient synthesis of 1-acylindolizines by 1,3-dipolar cycloaddition reactions of pyridinium ylides and  $\alpha,\beta$ -unsaturated aldehydes or

ketones in the presence of tetrapyridinecobalt dichromate

AUTHOR(S): Zhang, Xuechun; Cao, Weili; Wei, Xudong; Hu, Hongwen

CORPORATE SOURCE: Department of Chemistry, Nanjing University, Nanjing, 210093, Peop. Rep. China

SOURCE: Synthetic Communications (1997), 27(8), 1395-1403  
CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER: Dekker

DOCUMENT TYPE: Journal

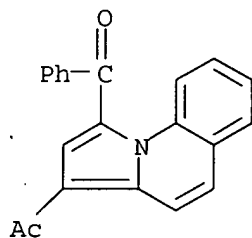
LANGUAGE: English

AB In the presence of tetrapyridinecobalt dichromate (CoPy<sub>4</sub>(HCrO<sub>4</sub>)<sub>2</sub>), pyridinium ylides and  $\alpha,\beta$ -unsatd. aldehydes or ketones undergo 1,3-dipolar cycloaddn. reactions followed by in situ aromatization to give 1-acyl substituted indolizines in moderate to good yields.

IT 189024-24-6P 189024-25-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

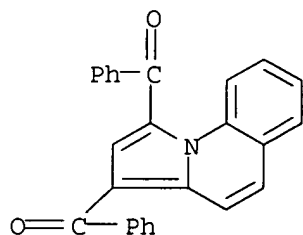
RN 189024-24-6 CAPLUS

CN Ethanone, 1-(1-benzoylpyrrolo[1,2-a]quinolin-3-yl)- (9CI) (CA INDEX NAME)



RN 189024-25-7 CAPLUS

CN Methanone, pyrrolo[1,2-a]quinoline-1,3-diylbis[phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:655585 CAPLUS

DOCUMENT NUMBER: 121:255585

TITLE: A facile synthesis of indolizines by 1,3-dipolar cycloaddition of pyridinium and related heteroaromatic ylides with alkenes in the presence of TPCD, Py<sub>4</sub>Co(HCrO<sub>4</sub>)<sub>2</sub>

AUTHOR(S): Zhu, Chang-cheng; Wei, Xu-dong; Hu, Jia-xin; Wang, De-fen; Hu, Hong-wen

CORPORATE SOURCE: Department of Chemistry, Nanjing University, Nanjing, 210008, Peop. Rep. China

SOURCE: Chemical Research in Chinese Universities (1994), 10(2), 93-101

10/733,229

CODEN: CRCUED; ISSN: 1005-9040

DOCUMENT TYPE:

Journal

LANGUAGE:

English

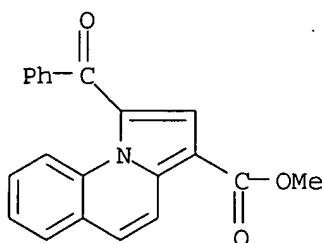
AB A facile one-step method is presented for the synthesis of indolizines in moderate to high yields by reaction of pyridinium, quinolinium and isoquinolinium ylides with acrylonitrile, Me acrylate and di-Et maleate resp. in the presence of tetrakis(pyridino)cobalt(II) dichromate (TPCD) in DMF.

IT 158670-26-9P 158670-27-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

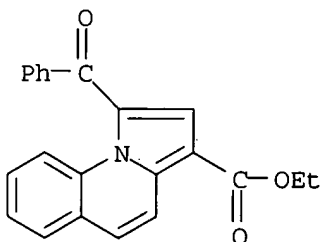
RN 158670-26-9 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carboxylic acid, 1-benzoyl-, methyl ester (9CI)  
(CA INDEX NAME)



RN 158670-27-0 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carboxylic acid, 1-benzoyl-, ethyl ester (9CI)  
(CA INDEX NAME)



L4 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:270005 CAPLUS

DOCUMENT NUMBER: 120:270005

TITLE: A facile one-step synthesis of aromatic indolizines by 1,3-dipolar cycloaddition of pyridinium and related heteroaromatic ylides with alkenes in the presence of TPCD [Copy4(HCrO4)2]

AUTHOR(S): Wei, Xudong; Hu, Yuefei; Li, Tingsheng; Hu, Hongwen  
CORPORATE SOURCE: Dep. Chem., Nanjing Univ., Nanjing, 210008, Peop. Rep. China

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1993), (20), 2487-9

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE:

Journal

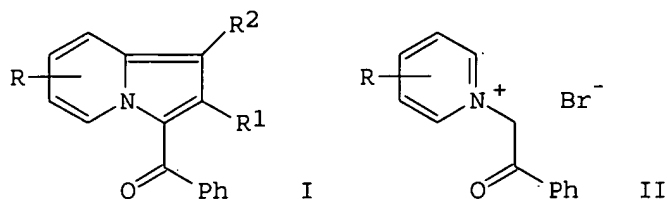
LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 120:270005

GI



AB A facile and general one-step method is presented for the preparation of aromatic

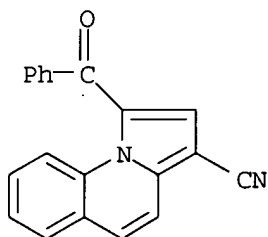
indolizine compds. I (R-R2 = alkyl, etc.) in moderate to high yields (53-99%) by reaction of the pyridinium N-ylides II (R = alkyl), quinolinium ylide or isoquinolinium ylide with various olefinic dipolarophiles, such as acrylonitrile, Me acrylate, acrylamide, di-Et maleate and Me crotonate, resp., in the presence of a new oxidant TPCD [Copy4(HCrO4)2, tetrapyridinecobalt(II) dichromate] at 90 °C for 2 h in DMF.

IT **25627-85-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation from pyridinium ylide and alkene)

RN 25627-85-4 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carbonitrile, 1-benzoyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:591612 CAPLUS

DOCUMENT NUMBER: 101:191612

TITLE: Use of dipolar species under phase-transfer catalysis.  
Part 1. 1,3-Dipolar cycloaddition in a two-phase system

AUTHOR(S): Alvarez-Builla, Julio; Quintanilla, M. Gloria; Abril, Catalina; Gandasegui, M. Teresa

CORPORATE SOURCE: Dep. Quim. Org., Univ. Alcala de Henares, Madrid, Spain

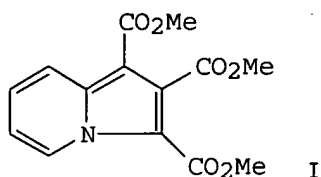
SOURCE: Journal of Chemical Research, Synopses (1984), (6), 202-3

CODEN: JRPSDC; ISSN: 0308-2342

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



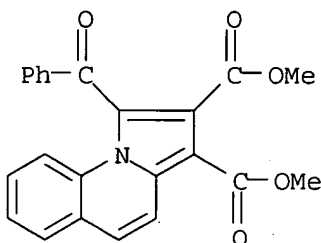
AB Eleven indolizines were prepared in 18-82% yield by 1,3-dipolar cycloaddn. of pyridinium ylides with RC.tplbond.CO<sub>2</sub>Me (R = MeO<sub>2</sub>C, Ph) in a 2-phase system. Addition of MeO<sub>2</sub>CC.tplbond.CO<sub>2</sub>Me to N-(methoxycarbonylmethyl)pyridinium chloride and KOH, supported on alumina (1:1) suspended in MeCN, at room temperature for >18 h, followed by dehydrogenation with 5% Pd-C at reflux for 4 h gave 44% indolizine I. Phase-transfer catalysts did not significantly improve the yields.

IT 17281-87-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, by cycloaddn. reaction of pyridinium ylide with acetylenic ester, in two-phase system)

RN 17281-87-7 CAPLUS

CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-benzoyl-, dimethyl ester  
(8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1983:143253 CAPLUS

DOCUMENT NUMBER: 98:143253

TITLE: Studies on 1,3-dipolar cycloaddition reactions of some cycloimmonium ylides

AUTHOR(S): Tewari, Ram S.; Dixit, Priya D.; Dubey, Ajay K.

CORPORATE SOURCE: Dep. Chem., H. B. Technol. Inst., Kanpur, 208 002, India

SOURCE: Journal of Chemical and Engineering Data (1983), 28(2), 283-5

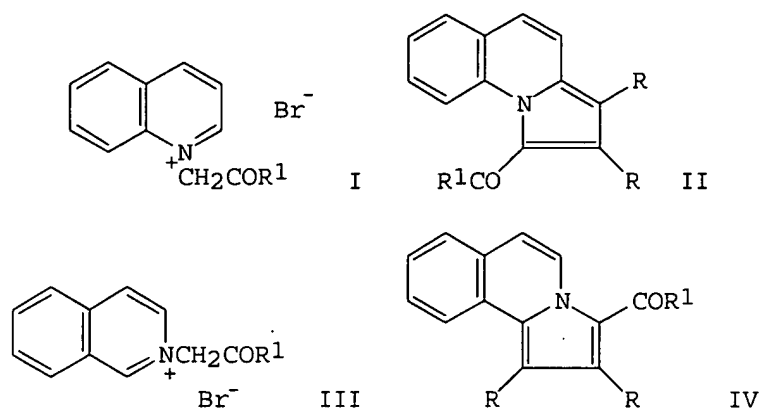
CODEN: JCEAAX; ISSN: 0021-9568

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 98:143253

GI



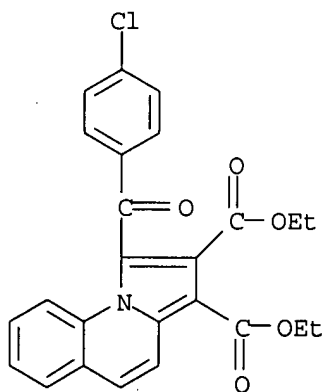
AB Benzindolizines were prepared by cycloaddn. of quinolinium and isoquinolinium ylides with acetylenic dipolarophiles. Treating phenacylquinolinium bromides I ( $R_1 = 4\text{-ClC}_6\text{H}_4$ , 2-naphthyl) and RC.tplbond.CR ( $R = \text{CO}_2\text{Me}$ ,  $\text{CO}_2\text{Et}$ ) in  $\text{C}_6\text{H}_6$  with  $\text{NEt}_3$  in  $\text{C}_6\text{H}_6$ , then refluxing 4-6 h gave 50-60% benzindolizines II. Similarly, phenacylisoquinolinium bromides III [ $R_1 = 4\text{-R}_2\text{C}_6\text{H}_4$  ( $R_2 = \text{Cl}$ ,  $\text{Me}$ ,  $\text{NO}_2$ ), naphthyl] and RC.tplbond.CR gave 50-60% benzindolizines IV.

IT **84801-86-5P 84801-87-6P 84801-88-7P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 84801-86-5 CAPLUS

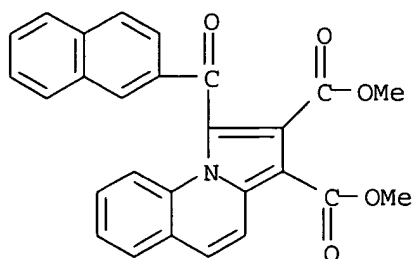
CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-(4-chlorobenzoyl)-, diethyl ester (9CI) (CA INDEX NAME)



RN 84801-87-6 CAPLUS

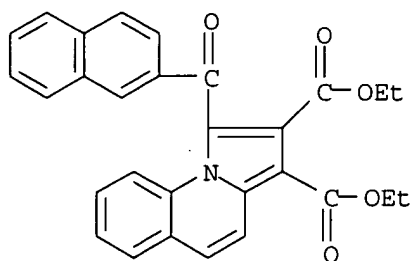
CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-(2-naphthalenylcarbonyl)-, dimethyl ester (9CI) (CA INDEX NAME)

10/733,229



RN 84801-88-7 CAPLUS

CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-(2-naphthalenylcarbonyl)-, diethyl ester (9CI) (CA INDEX NAME)

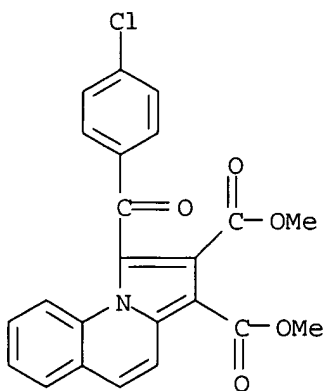


IT 84801-85-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, by cycloaddn. of cycloimmonium ylide with  
acetylenedicarboxylate)

RN 84801-85-4 CAPLUS

CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-(4-chlorobenzoyl)-, dimethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:35035 CAPLUS

DOCUMENT NUMBER: 96:35035

TITLE: Studies on 1,3-dipolar cycloaddition reactions of some  
cycloimmonium ylides

AUTHOR(S): Tewari, Ram S.; Dubey, Ajay K.; Misra, Naresh K.

CORPORATE SOURCE: Dep. Chem., H. B. Technol. Inst., Kanpur, 208002,  
India

10/733,229

SOURCE: Journal of Chemical and Engineering Data (1982),  
27(1), 101-3

CODEN: JCEAAX; ISSN: 0021-9568

DOCUMENT TYPE: Journal

LANGUAGE: English

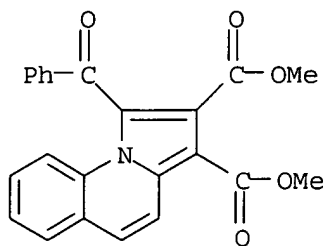
AB 1,3-Dipolar cycloaddn. reactions of zwitterionic quinolinium and isoquinolinium ylides, generated in situ from their resp. precursors, with acetylenic dipolarophiles yield benzoindolizine derivs. The reaction proceeds via the intermediacy of nonarom. primary adducts, which on dehydrogenation afford aromatized benzoindolizines.

IT 17281-87-7P 80242-13-3P 80242-14-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

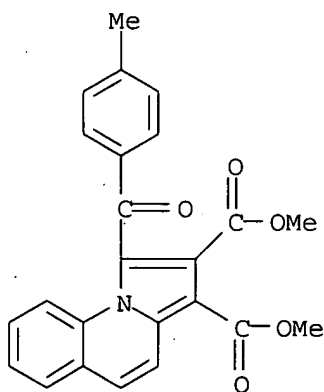
RN 17281-87-7 CAPLUS

CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-benzoyl-, dimethyl ester  
(8CI, 9CI) (CA INDEX NAME)



RN 80242-13-3 CAPLUS

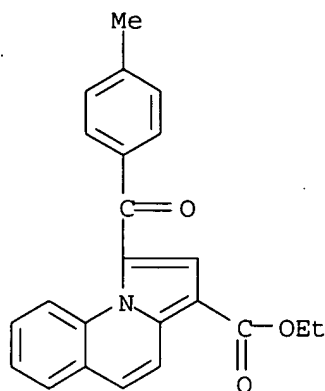
CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-(4-methylbenzoyl)-,  
dimethyl ester (9CI) (CA INDEX NAME)



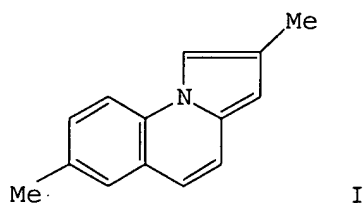
RN 80242-14-4 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carboxylic acid, 1-(4-methylbenzoyl)-, ethyl  
ester (9CI) (CA INDEX NAME)

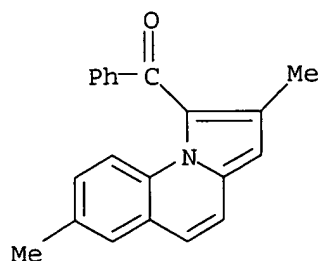




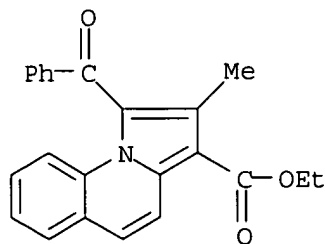
L4 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1979:456793 CAPLUS  
 DOCUMENT NUMBER: 91:56793  
 TITLE: Studies on heterocyclic compounds. Part 49.  
 Synthesis and reaction of 2,7-dimethylpyrrolo[1,2-  
 a]quinoline with electrophilic reagents  
 AUTHOR(S): Kuo, Hsien-Saw; Yoshina, Shigetaka; Tung, Yih-Chih  
 CORPORATE SOURCE: Fac. Pharm., Meijo Univ., Nagoya, Japan  
 SOURCE: Journal of Heterocyclic Chemistry (1979), 16(2), 393-5  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 91:56793  
 GI



AB 2,7-Dimethylpyrrolo[1,2-a]quinoline (I) was prepared from  
 2,9-dimethylquinoline and BrCH<sub>2</sub>COMe via a Tschitschibabin reaction. The  
 electrophilic substitution reactions of I, namely nitrosation, acylation,  
 diazonium coupling, formylation, bromination, and nitration, were studied.  
 IT **70121-01-6P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 70121-01-6 CAPLUS  
 CN Methanone, (2,7-dimethylpyrrolo[1,2-a]quinolin-1-yl)phenyl- (9CI) (CA  
 INDEX NAME)



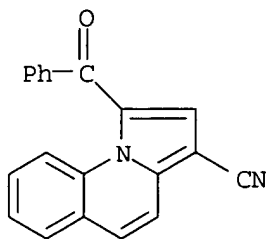
L4 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1974:120721 CAPLUS  
 DOCUMENT NUMBER: 80:120721  
 TITLE: Pyrrolo[1,2-a]quinolines. Reinvestigation  
 AUTHOR(S): Irwin, W. J.; Wibberley, D. G.  
 CORPORATE SOURCE: Dep. Pharm., Univ. Aston, Birmingham, UK  
 SOURCE: Journal of the Chemical Society, Perkin Transactions  
 1: Organic and Bio-Organic Chemistry (1972-1999)  
 (1974), (2), 250-2  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB Et 2-quinolylacetate (I; R = H, R1 = CO2Et) with PhCOCH2Br gave, after treatment with HCl and NaOH, I (R = CO2Et, R1 = CH2COPh) which with Ac2O gave 26% pyrroloquinoline (II; R = Me, R1 = PhCO) and 20% II (R = Ph, R1 = H).  
 IT 13526-93-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (structure vs. 2-benzoyl-3-(ethoxycarbonyl)-1-methylpyrrolo[1,2-a]quinoline, from reaction of Et quinolylacetate with phenacyl bromide)  
 RN 13526-93-7 CAPLUS  
 CN Pyrrolo[1,2-a]quinoline-3-carboxylic acid, 1-benzoyl-2-methyl-, ethyl ester (8CI, 9CI) (CA INDEX NAME)



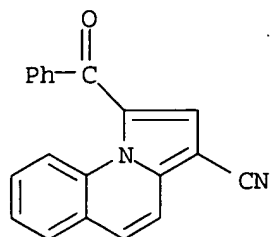
L4 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1971:435631 CAPLUS  
 DOCUMENT NUMBER: 75:35631  
 TITLE: Indolizines from phenacylcyclimonium salts  
 AUTHOR(S): Froehlich, Juerg; Kroehnke, Fritz  
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Giessen, Giessen, Fed. Rep. Ger.  
 SOURCE: Chemische Berichte (1971), 104(5), 1621-8  
 CODEN: CHBEAM; ISSN: 0009-2940  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German

10/733,229

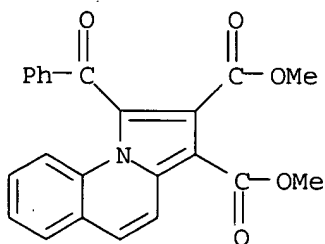
GI For diagram(s), see printed CA Issue.  
AB Dipolar 1,3-addition of  $H_2C:CHCN$  to N-ylides, generated in situ by bases from N-phenacylcyclimmonium salts (I), e.g. N-phenacylpyridinium bromide gave tetrahydroindolizines (II), e.g. 3-benzoyl-1-cyano-1,2,3,8a-tetrahydroindolizine. II were dehydrogenated to dihydroindolizines (III), e.g. 3-benzoyl-1-cyano-2,3-dihydroindolizine and indolizines (IV), e.g. 3-benzoyl-1-cyanoindolizine.  
IT **25627-85-4P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 25627-85-4 CAPLUS  
CN Pyrrolo[1,2-a]quinoline-3-carbonitrile, 1-benzoyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1970:78938 CAPLUS  
DOCUMENT NUMBER: 72:78938  
TITLE: Chemistry of cyanoacetylenes. V. 1,3-Dipolar cycloaddition reactions of cyanoacetylenes with N-ylides and N-imines  
AUTHOR(S): Sasaki, Tadashi; Kanematsu, Ken; Yukimoto, Yusuke  
CORPORATE SOURCE: Fac. Eng., Nagoya Univ., Nagoya, Japan  
SOURCE: Journal of the Chemical Society [Section] C: Organic (1970), (3), 481-5  
CODEN: JSOAX; ISSN: 0022-4952  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 72:78938  
AB 1,3-Dipolar cycloaddn. reactions of zwitterionic pyridinium, quinolinium, and isoquinolinium phenacylides with cyanoacetylene or chlorocyanoacetylene gave 1-cyanoindolizine derivs. Similar reactions of N-aminopyridinium and isoquinolinium salts gave 3-cyanopyrazol[1,5-a]pyridine derivs. A 3-methylpyridinium ylide reacted with the same dipolarophiles at the 2-position, in spite of hindrance by the Me group. Reactions of cyclopentadiene ylides with cyanoacetylenes gave trans-2-(2-cyanovinyl)cyclopentadiene ylides.  
IT **25627-85-4P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 25627-85-4 CAPLUS  
CN Pyrrolo[1,2-a]quinoline-3-carbonitrile, 1-benzoyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1968:49411 CAPLUS  
 DOCUMENT NUMBER: 68:49411  
 TITLE: Pyridinium ylides in synthesis. III. Synthesis of indolizines  
 AUTHOR(S): Henrick, C. A.; Ritchie, E.; Taylor, Walter Charles  
 CORPORATE SOURCE: Univ. Sydney, Sydney, Australia  
 SOURCE: Australian Journal of Chemistry (1967), 20(11), 2467-77  
 CODEN: AJCHAS; ISSN: 0004-9425  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB Treatment of pyridinium, quinolinium, and isoquinolinium ylides with acetylenes yields indolizine, such as I, derivs. Pyridinium phenacylide with iodine in dimethylacetamide gives 1,2,3-tribenzoylindolizine. Decomposition of pyridinium phenacylide in the presence of copper or copper oxide affords 1,3-dibenzoylindolizine. 20 references.  
 IT **17281-87-7P**  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 17281-87-7 CAPLUS  
 CN Pyrrolo[1,2-a]quinoline-2,3-dicarboxylic acid, 1-benzoyl-, dimethyl ester (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1967:37869 CAPLUS  
 DOCUMENT NUMBER: 66:37869  
 TITLE: A new synthesis of indolizines and related nitrogen-bridgehead compounds  
 AUTHOR(S): Melton, Timothy; Taylor, J.; Wibberley, Denman G.  
 CORPORATE SOURCE: Tech. Coll., Sunderland, UK  
 SOURCE: Chemical Communications (London) (1965), (8), 151-2  
 CODEN: CCOMA8; ISSN: 0009-241X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.

10/733,229

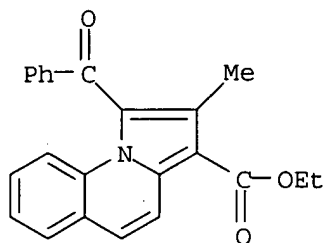
AB A route to indolizines involving closure at the 2-3-position by an intramol. aldol-type condensation is given. Thus, 2-(benzoylmethylene)-1-benzyl-1,2-dihydropyridine I (R = H) yielded 1-acetyl-2,3-diphenylindolizine II (R = R1 = Ph), on treatment with boiling Ac2O. Similarly prepared were 2-acetoxy-1-acetyl-3-phenylindolizine II (R = OAc, R1 = Ph), 1-benzoyl-2-methyl-3-carbethoxypyrrolo[1,2-a]quinoline III (R = Me, R1 = Bz, R2 = CO2Et) and 3-acetyl-1,2-diphenylpyrrolo[1,2-a]quinoline III (R = R1 = Ph, R2 = Ac). By the same method I (R = Ph) yielded the pyrrolopyridine (V)

IT 13526-93-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 13526-93-7 CAPLUS

CN Pyrrolo[1,2-a]quinoline-3-carboxylic acid, 1-benzoyl-2-methyl-, ethyl ester (8CI, 9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 12:01:06 ON 05 JUL 2005)

FILE 'REGISTRY' ENTERED AT 12:01:21 ON 05 JUL 2005

L1 STRUCTURE UPLOADED

L2 7 S L1

L3 145 S L1 FULL

FILE 'CAPLUS' ENTERED AT 12:01:55 ON 05 JUL 2005

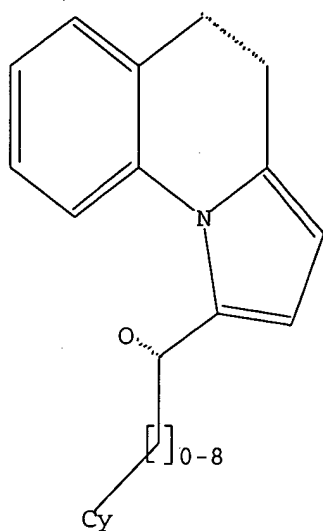
L4 19 S L3

=> d l1

L1 HAS NO ANSWERS

L1 STR

10/733,229



Structure attributes must be viewed using STN Express query preparation.

=>